# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

Standard Chlorine Jacobus - MAC Products Vapor Intrusion - Removal Polrep Initial Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject: POLREP #1

Administrative Settlement Agreement and Order on Consent Signed (BB)

**Standard Chlorine Jacobus - MAC Products Vapor Intrusion** 

A21V Kearny, NJ

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**Date:** 8/18/2014

Reporting Period: August 15, 2014 through August 18, 2014

# 1. Introduction

# 1.1 Background

Site Number: A21V Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLAResponse Type:Time-CriticalResponse Lead:PRPIncident Category:Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 8/15/2014 Start Date: 8/15/2014

Demob Date: Completion Date:

CERCLIS ID: NJN000206579 RCRIS ID:

ERNS No.: State Notification: 12/16/2011

# 1.1.1 Incident Category

This is a Removal Action undertaken by MAC Products, the Responsible Party (RP), under a signed Administrative Settlement Agreement and Order on Consent (Agreement). This qualifies as a BB coded event.

# 1.1.2 Site Description

The Site is located in an industrial corridor in the southern part of Kearny, Hudson County, New Jersey. The Site consists of two adjacent, separately owned properties currently occupied by active businesses. MAC Products, located at 60 Pennsylvania Avenue (Block 289, Lots 16, 16.01, 17), represents the northern property on the Site. The company designs and manufactures various products for the utilities, transportation and construction industries. MAC Products is bordered to the north by Pennsylvania Avenue; the east by Jacobus Avenue; the south by the Melon Leasing property; and the west by a tractor trailer parking lot. Although the Site is viewed as two individual properties, this POLREP is reflective on actions taken solely on MAC Products (herein referred to as "property" or "facility").

#### 1.1.2.1 Location

The 4.5 acre MAC Products property contains many interconnected buildings in three distinct areas. Buildings are known as A, B and C. Building A is the southernmost located structure; Building B is in the center of the property; Building C is the eastern most connected structures. All surface areas belonging to MAC Products are paved.

# 1.1.2.2 Description of Threat

There is an actual or potential exposure to human populations at the MAC Products facility. Results from a sub-slab sampling event indicate high concentrations of volatile organic compounds (VOCs) under several buildings throughout the property. In particular, concentrations of Trichloroethylene (TCE) under Building B were found as high as  $210,000 \, \mu g/m^3$ . Additionally, levels of naphthalene and 1,4-dichlorobenzene were found to be of concern. Subsequent indoor air samples confirmed a vapor intrusion pathway for TCE and additional VOC compounds. Concentrations of TCE were found to exceed EPA risk-based screening criteria in an occupational setting. Workers occupy the facility 5-6 days out of the week for approximately 8 hours per day.

# 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In September 2012 EPA approached MAC Products with request to allow Agency personnel to collect sub-slab samples under the buildings located throughout the property. The request was presented based on ground water findings from samples collected at the neighboring property, Melon Leasing. In lieu of sampling, MAC Products requested the opportunity to install sub-slab depressurization systems (SSDSs). EPA-generated criteria was given to MAC Products that must be met in order for the Agency to entertain the idea of the proposal. In November 2012 MAC Products request an extension for providing details on a mitigation system due to infrastructure damage as a result of Hurricane Sandy.

In January 2013 EPA and contractors visited the Melon Leasing and MAC Products facilities. Surface samples were collected from the Site and analyzed for dioxin. Concentrations of dioxin were found at levels of concern on the MAC Products property. As a result, all surface areas were paved under a separate removal action undertaken by the PRP.

Dialog regarding the potential installation of SSDSs continued in April 2013 when MAC Products hired an environmental consultant. Following internal discussions, MAC Products decided to conduct a conventional vapor intrusion investigation at the property by studying the sub-slab and indoor air prior to installation of any remediation systems.

In September 2013 a total of 18 sub-slab samples were collected from the various buildings through the MAC Products facility. MAC Products shared the sample results towards the end of November 2013. Concentrations of TCE were found as high as  $210,000 \, \mu g/m^3$  in Building B. In addition, concentrations

of tetrachloroethylene (PCE) were found at  $500,000~\mu g/m^3$ , naphthalene at  $380,000~\mu g/m^3$  and 1,4-dichlorobenzene at  $95,000~\mu g/m^3$ . EPA discussed the severity of high TCE concentrations and requested indoor air samples be collected. In December 2013 EPA and MAC Products collected split indoor air samples in all three buildings. A total of fourteen (14) samples were collected and analyzed for TO-15 constituents. TCE concentrations were found as high as  $3.6~\mu g/m^3$  in Building B, naphthalene at  $6.3~\mu g/m^3$  and  $6.5~\mu g/m^3$  in Building A and C respectively and 1,4-dichlorobenzene at  $24\mu g/m^3$  and  $26~\mu g/m^3$  in Building B.

In January 2014 MAC Products stated as a result of the VOC concentrations found in sub-slab and indoor air samples, SSDSs would be installed. Several months later EPA requested additional sampling at the facility. The sampling design was expanded to include areas of MAC Products occupied by sensitive populations. In March 2014 a total of twenty-three (23) locations were sampled, including a re-sampling of the original 14 locations from the December 2013 event. Results from the March 2014 event showed concentrations of TCE at  $11\mu g/m^3$ , naphthalene at  $12 \mu g/m^3$  and 1,4-dichlorobenze at  $120 \mu g/m^3$ .

Concentrations of TCE were found to exceed EPA risk-based screening criteria in an occupational setting. In addition, a vapor intrusion direct pathway to indoor air was found to exist for this and other VOC compounds. In April 2014 MAC Products verbally agreed to enter into an Agreement with EPA for the installation and monitoring of SSDSs.

On August 15, 2014 EPA and MAC products entered into an Administrative Settlement Agreement and Order on Consent for the evaluation, construction and maintenance of SSDSs within Building B. Work Plans, a Health and Safety Plan, an employee notice of activities and a Quality Assurance Project Plan were reviewed, evaluated and approved prior to approval of the Agreement.

### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

The Agreement outlines actions that will be taken by MAC Products including the evaluation, installation and maintenance of SSDSs in Building B. This section will highlight the actions as they take place and are subsequently completed.

# 2.1.2 Response Actions to Date

The Administrative Settlement Agreement and Order on Consent became effective on August 15, 2014 following signature by EPA and receipt by MAC Products. This initiated the removal action. MAC Products will commence the diagnostic testing within 2-4 weeks from this date. Diagnostic testing will be conducted in accordance with procedures outlined in the Vapor Concern Mitigation Plan dated July 2014.

### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

MAC products has been identified as a Potentially Responsible Party for this project.

# 2.2 Planning Section

#### 2.2.1 Anticipated and Planned Response Activities

MAC Products has agreed to evaluate, install and maintain SSDSs within Building B of the facility. The first phase will be to perform diagnostic testing which will help determine the volume of contaminated air to draw, amount of extraction points, size of the blowers/fans and appropriate locations of mitigation points.

Currently, bi-weekly progress reports are required to keep EPA informed of actions taken and results of tests performed.

# 2.2.2 Next Steps

Diagnostic testing will commence within 2-4 weeks.

#### **2.2.3 Issues**

No significant issues to report at this time.

# 2.3 Logistics Section

All logistical needs and issues will be handled by the PRP.

#### 2.4 Finance Section

#### 2.4.1 Narrative

Cost recovery measures will be taking place in parallel with the removal action. As per the Administrative Settlement and Agreement on Consent, EPA will charge MAC Products for time and resources following initiation of the Removal Action and implementation of the Agreement.

#### 2.5 Other Command Staff

# 2.5.1 Safety Officer

This position is being addressed by Vincent Pappalardo of Eikon Planning, a sub-contractor to MAC Products.

#### 2.5.2 Liaison Officer

This position is inactive for the removal action.

#### 2.5.3 Information Officer

The OSC will act as the point of contact for information being requested by employees of MAC Products. Public Affairs has not been activated for this response.

# 3. Participating Entities

#### 3.1 Unified Command

UC is not necessary for this removal action.

# 3.2 Cooperating Agencies

EPA has been communicating with NJDEP on efforts to have SSDSs installed and any additional work required.

#### 4. Personnel On Site

EPA will allocate one OSC for operational activities.

#### 5. Definition of Terms

# **Definition of Terms**

Assisting and Cooperating Agencies - Agencies who are assisting the EPA response, but are not a part of Unified Command.

E Goods - Electronic machines which contain hazardous components. Emergency Response - any activity undertaken by the Operations Section which mitigated an immediate threat to human health or the environment.

FRP - Facility Response Plan. Under the Clean Water Act, as amended by the Oil Pollution Act, a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil. Required by certain facilities that store and use large quantities of oil.

Household Hazardous Waste - Small quantity waste from households that contain corrosive, toxic, ignitable, or reactive ingredients is hazardous. This includes pesticides, paint, solvents, etc.

Hazardous Debris - Debris which contains compounds that make it inappropriate for municipal landfill

disposal

Monitoring - Using equipment which will give limited real-time information about constituents in environmental media. This method is used most often for air and water testing.

RCRA - Resource Conservation and Recovery Act.

RMP- Risk Management Plan. Under the Clean Air Act, certain facilities with large quantities of toxic potentially air born chemicals whose releases may impact human populations are required to submit to EPA a plan for hazard assessment, prevention, and emergency response.

Sampling -The process of taking environmental media for analysis at a laboratory of its constituents. These tests may require multiple days to complete, but test for a wider array of constituents than monitors.

Small Container - any container with a potential capacity of less than 5 gallons.

TRI - Toxic Release Inventory - A publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

Unified Command - A structure based on the Incident Command System (ICS) that brings together the Incident Commanders of all major organizations involved in the incident in order to coordinate an effective response, while at the same time allowing each to carry out their own jurisdictional, legal, and functional responsibilities.

White Goods - Large home electronics such as refrigerators, washing machines, and dryers.

WW - Wastewater Treatment Facilities

#### 6. Additional sources of information

# **6.1 Internet location of additional information/report** epaosc.org

#### 6.2 Reporting Schedule

MAC Products is currently scheduled to provide EPA with bi-weekly progress reports. Following installation of SSDSs and evidence the systems are working appropriately, reports will be limited to monthly.

# 7. Situational Reference Materials

Refer to the documents section of epaosc.org